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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/826,811	04/06/2001	Stephen Gold	1509-165	6456

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IP Administration
C/o Hewlett-Packard Company
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EXAMINER

TO, BAOQUOC N

ART UNIT	PAPER NUMBER
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2172

DATE MAILED: 11/19/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/826,811

Applicant(s)

GOLD ET AL.

Examiner

Baoquoc N To

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 21-47 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 21-47 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) ____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s) ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

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DETAILED ACTION

1. Claims 1-20 are canceled and newly added claims are 21-47.
2. Claims 21-47 are pending in this application.

Response to Arguments

3. Applicant's arguments filed 08/27/03 have been fully considered but they are not persuasive.

The applicant argues that, "there is no disclosure that mass memory 14 is a client memory or one of a plurality of client memories that is back up by a backup memory."

The examiner respectfully disagrees with the above argument because Saxon discloses, "in the alternative embodiment, many more devices, including client and server computers and storage devices, could be connected to the network 8 and the backup scheduler 28 could control the backup of some or all of the devices on the network 18. It is also possible to connect to other networks where storage devices could reside." (col. 5, lines 9-14). The client computer is the storage device that connected to the network 18.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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4. Claims 21-47 are rejected under 35 U.S.C. 103(a) as being unpatentable over Saxon (US. Patent No. 5,758,359).

Regarding on claims 21, Saxon teaches a method of backing up files of plural client computers to a back up computer having a bulk storage device for storing files to be back up of client computers each of said client computers comprising a data storage device having a client data storage area storing files desired to be back up to the bulk data storage device said method comprising:

Operating said back up computer so back up data stored in said client data storage areas of each of said plurality of client computers is selectively back up in the bulk storage device,

Determining if back-up to the bulk storage device is to be performed for the files desired to be backed up of a particular client computer by performing the following steps at each particular client computer:

(a) maintaining a list of files (backup catalog information) of said particular client computer allocated for backup (col. 4, lines 39-57);

(b) maintaining total file data (total size of the save set) describing the size of each of said listed files of the particular computer (col. 4, lines 39-57);

(c) determining the total file size data describing the size of said listed files of said particular client computer (one the new save set sizes have been computed, the method computes a total size by adding together the new save set sizes) (col. 3, lines 3-5);

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(d) comparing said total file size data with predetermined size limit (the total size is compared to the maximum size threshold) (col. 3, lines 5-15); and

(e) determining whether to back up said client files or not, depending on said comparison between said total file size data and said predetermined size limit (selected files on the remaining of the identified save sets are thus deemed eligible for backup) (col. 3, lines 16-17).

Although, Saxon does not explicitly teach backup from the client computer; however, Saxon teaches, "the save sets created during backup may be stored on the backup storage element as thus described or over the network onto a remote storage device 38. In the alternative embodiment, many more devices, including client and server computers and storage devices, could be connected to the network 18 and the backup scheduler 28 could control backup of some or all of the devices on the network 18" (col. 5, lines 6-13). This teaches the backup scheduler 28 back up client computers. Therefore, it would have been obvious to one ordinary skill in the art at the time of the invention was made to include backing up client computer in order to provide the safe guard for the information stored in the client computer.

Regarding on claim 22, Saxon teaches the step of determining whether or not to back up said client data comprises:

Comparing (comparing) said total file size data with a first file size limit (col. 7, lines 47-50);

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If said total file size data exceeds said first file size limit, generating a warning message indicating first file size limit is exceeded (col. 7, lines 50-57); and

Performing back up of said data files within said file size limit (col. 7, lines 50-57).

Regarding on claim 23, Saxon teaches the step of determining whether or not to back up said client files comprises:

Comparing (comparing) said total file size data with a second file size limit data (col. 7, lines 47-50);

If said total file size data exceeds said second file size limit (new), then prohibiting back up said client files (col. 7, lines 50-57).

Regarding on claim 24, Saxon teaches the step of determining whether or not back up said client files comprises:

Comparing (comparing) said total size data with a second file (new) size limit data (col. 7, lines 50-57);

If said total file size data exceeds said second file size limit, the prohibiting back up of said client files (col. 7, lines 50-57); and

Generating a warning message said second file size limit is exceeded (col. 8, lines 1-22).

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Regarding on claim 25, Saxon teaches maintaining a quota list, listing a plurality of files stored in a back up region of said client computer, wherein for each said file there are stored size data describing the size of said file (col. 7, lines 22-27).

Regarding on claim 26, Saxon teaches for the particular client computer, summing the total of all said file sizes to obtain total file size data of files stored in the back up storage are of said client computer (col. 7, lines 22-27).

Regarding on claim 27, Saxon teaches for the particular client computer, storing a difference list listing differences between files backed up during a previous back up process and files currently stored in the back up data storage area of said client computer (col. 7, lines 30-40).

Regarding on claim 28, Saxon teaches the size of teach file is determined by comparing a list of current files of the particular client computer desired to be back-up with a list of files desired to be back-up for the particular client computer during the immediately previous back-up, altering list for each changed file desired to be back up for the particular client computer, for each deleted file for the particular client computer removing the file from the list, for each added file for the particular client computer adding the file to the list (col. 7, lines 45-65).

Regarding on claim 29, Saxon teaches the size of the desired file to be back-up to back up computer for the particular client computer is determined by using delta back-up procedures (col. 7, lines 45-65).

Regarding on claim 30, Saxon teaches a method of operating a back up computer, said back up computer comprising:

A data storage device (storage devices) for storing backup files of plural client computers (col. 5, lines 9-10);

said method comprising steps of selectively transmitting backup files of the client computer to the back up storage device;

Receiving at the backup computer total file size data (total size) for and from each of the client computers, each said total file size data representing the total file size at said client computer of files with the client computer desires to be backed up to said back up computer (col. 7, lines 46-60); and

For each said client computer, activating the backup computer to respond to the stored total size data so the back up computer determines a file size limit representing a limit of total file size for each said client computer, for which back up of files is permitted (col. 7, lines 46-60).

Although, Saxon does not explicitly teach backup from the client computer; however, Saxon teaches, "the save sets created during backup may be stored on the backup storage element as thus described or over the network onto a remote storage device 38. In the alternative embodiment, many more devices, including client and

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server computers and storage devices, could be connected to the network 18 and the backup scheduler 28 could control backup of some or all of the devices on the network 18" (col. 5, lines 6-13). This teaches the backup scheduler 28 back up client computers. Therefore, it would have been obvious to one ordinary skill in the art at the time of the invention was made to include backing up client computer in order to provide the safe guard for the information stored in the client computer.

Regarding on claim 31, Saxon teaches transmitting from the backup computer to the client computers the file size limit determined for each client computer (col. 7, lines 40-67).

Regarding on claim 32, Saxon teaches a method of operating a client computer, said client computer comprising:

A data storage device (storage device) for storing files of the client computer, said data storage device having a back-up data storage area from which files can be sent for backup to a back up computer (col. 5, lines 5-14);

Said method comprising the step of:

Storing in said back-up data storage area files desired to be backed-up (col. 7, lines 40-67);

Creating a list of files resident in said back-up data storage area (col. 7, lines 34-40);

For each said file on said list, storing size data describing the size client file (total file) (col. 7, lines 41-43);

Summing (computing) said plurality of file sizes to obtain a summed file size total (col. 7, lines 41-43); and

Comparing (compared) said summed file size total (total size) with a size quota limit (maximum size threshold) (col. 7, lines 47-65).

Although, Saxon does not explicitly teach backup from the client computer; however, Saxon teaches, "the save sets created during backup may be stored on the backup storage element as thus described or over the network onto a remote storage device 38. In the alternative embodiment, many more devices, including client and server computers and storage devices, could be connected to the network 18 and the backup scheduler 28 could control backup of some or all of the devices on the network 18" (col. 5, lines 6-13). This teaches the backup scheduler 28 back up client computers. Therefore, it would have been obvious to one ordinary skill in the art at the time of the invention was made to include backing up client computer in order to provide the safe guard for the information stored in the client computer.

Regarding on claim 33, Saxon teaches size quota limit comprises a first size limit (col. 7, lines 45-65), and

Said method further comprises the step of warning at said client computer that said first quota limit is exceeded in response to said summed total file size data exceeding said size quota limit (col. 7, lines 45-65).

Regarding on claim 34, Saxon teaches size quota limit comprises a second quota limit (new) (col. 7, lines 45-60); and

Said method further comprises the step of:

Prohibiting back-up of least one file in said client back-up data storage area in response to said summed file size data being greater than said second quota limit data (col. 7, lines 45-60).

Regarding on claim 35, Saxon teaches comparing a list of current files in said client back-up data storage area with a previously generated list of files representing the status of files in said back-up client area at a previous time (col. 7, lines 45-60);

Identifying files which have changed between said current files list and said previous file list (col. 7, lines 45-60); and

Generating a difference list listing said files that have changed between said current file list and said previous files list (col. 7, lines 45-60).

Regarding on claim 36, Saxon teaches a client computer comprising:

A data storage device (storage devices) having a data storage area for files which are subject to a back-up process (col. 5, lines 9-10);

An interface device (network) (col. 5, lines 9-10); and

A data processor (control the backup) (col. 5, lines 10-11) for managing back-up of files in said backed-up data storage area, said data processor being arranged to (a)

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send said files to a back up computer via said interface device (connected to network) (col. 5, lines 9-10) (b) receive a first quota limit from an external source (total size is compared to the maximum) (col. 7, lines 41-60), said first quota limit describing an amount of data storage capacity said client computer is permitted to maintain in said data storage area for files which are subject to a back-up process (col. 7, lines 41-60).

Although, Saxon does not explicitly teaches backup from the client computer; however, Saxon teaches, "the save sets created during backup may be stored on the backup storage element as thus described or over the network onto a remote storage device 38. In the alternative embodiment, many more devices, including client and server computers and storage devices, could be connected to the network 18 and the backup scheduler 28 could control backup of some or all of the devices on the network 18" (col. 5, liens 6-13). This teaches the backup scheduler 28 back up client computers. Therefore, it would have been obvious to one ordinary skill in the art at the time of the invention was made to include backing up client computer in order to provide the safe guard for the information stored in the client computer.

Regarding on claim 37, Saxon teaches data processor is arranged to receive a second quota limit from an external source, said second quota limit describing an amount of data storage capacity which said client computer is permitted to maintain in said data storage area for files which are subject to a back-up process (col. 7, lines 45-60).

Regarding on claim 38, Saxon teaches client data processor is arranged to:

Maintaining a quota list describing the amount of data allowed to be stored in said data storage area for files which are subject to a back-up process (col. 7, lines 45-60);

Maintaining a file list describing one or more files currently stored in said data storage area for files which are subject to a back-up process (col. 7, lines 35-40);

Maintaining a previous file list (save set) describing a plurality of files previously stored in said data storage are immediately prior to a last back-up operation carried out by data processor for files which are subject to a back-up process (col. 7, lines 35-40);
and

Maintain a difference list storing data (new save list) describing differences between files on said new file list, and files on said previous file list (col. 7, lines 35-40).

Regarding on claim 39, Saxon teaches a method of backing-up data of a client computer, said method comprising steps of:

Each time a back-up operation of said client computer is initiated, determining the total size of all files of said client computer to be back up (maximum amount of data to be backup) (col. 7, lines 24-27), and determining whether performance of said back-up would cause first predetermined quota list limit to be exceeded (first limit included with the system) (col. 7, lines 24-27), and if the first limit is exceeded determining if

performance of said back-up would cause a second predetermined quota limit to be exceeded (maximum size threshold) (col. 7, lines 48-60);

If it is determined that performance of said back up would cause said first predetermined quota limit to be exceeded, but said second predetermined quota limit not to be exceeded, then proceeding with said back-up, and generating a warning signal warning that said first predetermined quota limit is exceeded (the system is build in with the first limit for backing the system) (col. 7, lines 48-52);

Saxon does not explicitly teach if performance of said back-up would exceed said second predetermined quota limit, then prohibiting said back-up, and generating a warning signal that said second predetermined quota limit would be exceeded; and performing the back-up if the first limit is not exceeded. However, Saxon also teaches, "the total size is compared to the maximum size threshold to determine if the total size is less than or equal to the maximum size threshold 62. If the total size exceeds the threshold, the method performs the steps of: i) determining if there is a next most recent save set 64; ii) eliminating if there is next most recent save set by subtracting the "new" save set size of the most recent save set the most recent save set from the total size 66; iii) making the next most recent save set the most recent save set 68; iv) updating the current timestamp at step 60; v) comparing the resulting the total size is less than or equal to the threshold at step 62..." (col. 7, lines 52-66). Saxon's system is more advantage over the claimed invention because Saxon's system is able to determine the cause of the problem backing up and solve it by subtracting the new over the old saved file size. The current invention can and only to determine the problem and stop the

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backup process. Saxon does not need to generate the warning signal because it can resolve the size problem and continue with the backup process. Therefore, it would have been obvious to one ordinary skill in the art at the time of the invention was made to modify the resolving the backing up size limit problem as taught in Saxon in order to provide the backup system is the same or even better than the claimed invention.

Regarding on claim 40, Saxon teaches a method of operating a client computer, said client computer comprising:

A data storage device (storage device) for storing client files, said data storage device having a back-up data storage area from which files can be sent to a back-up computer for back-up (col. 6, lines 5-14);

Said method comprising the steps of:

Storing files desired to be back up to the back-up computer in the back-up data storage area (col. 5, lines 5-14);

Maintaining a quota list (total size), said quota list comprising a list of files in said back-up data storage area which were back up during a previous back-up operation (col. 7, lines 22-28);

Backing up to the back-up computer said files stored in said back up data storage area (col. 5, lines 5-14);

In response to said back up operation, modifying said quota list to list the actually within a quota list (eliminating the most recent save by subtracting the "new" save set size of the most recent save set 64) (col. 7, lines 52-55).

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Although, Saxon does not explicitly teach client computer; however, Saxon teaches, "the save sets created during backup may be stored on the backup storage element as thus described or over the network onto a remote storage device 38. In the alternative embodiment, many more devices, including client and server computers and storage devices, could be connected to the network 18 and the backup scheduler 28 could control backup of some or all of the devices on the network 18" (col. 5, lines 6-13). This teaches the backup scheduler 28 back up client computers. Therefore, it would have been obvious to one ordinary skill in the art at the time of the invention was made to include backing up client computer in order to provide the safe guard for the information stored in the client computer.

Regarding on claim 41, Saxon teaches producing a modified quota list comprising list of files currently in said back up data storage area (subtract) (col. 7, lines 45-60); and

Determining from said modified quota list, whether performance of a back up operation is within a quota list (col. 7, lines 45-60).

Regarding on claim 42, Saxon teaches the step of producing the modified quota list comprises:

Generating a difference list (new list), said difference list listing details of files which have difference between the current content of said backed up data storage area and said quota list (col. 7, lines 35-45).

Regarding on claim 43, Saxon teaches the size of the desired files to be back-up to the back up computer for the particular client computer is determined by using delta back-up procedures (col. 7, lines 45-60).

Regarding on claim 44, Saxon teaches the size of the desired file to be backed-up to the back computer for the particular client computer is determined by using delta back-up procedures (col. 7, lines 45-60).

Regarding on claim 45, Saxon teaches the size of the desired file to be back-up to the back up computer for the particular client computer is determined by using delta back-up procedures (col. 7, lines 45-60).

Regarding on claim 46, Saxon teaches the size of the desired file to be back-up to the back up computer for the particular client computer is determined by using delta back-up procedures (col. 7, lines 45-60).

Regarding on claim 47, Saxon teaches the data processor is arranged to determine the size of the desired file to be back-up to the back up computer (col. 7, lines 45-60).

Conclusion

5. THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Contact Information

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Baoquoc N. To whose telephone number is (703) 305-1949 or via e-mail BaoquocN.To@uspto.gov. The examiner can normally be reached on Monday-Friday: 8:00 AM – 4:30 PM, EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kim Y. Vu can be reached at (703) 305-4393.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, D.C. 20231.


The fax numbers for the organization where this application or proceeding is assigned are as follow:

- (703) 746-7238 [After Final Communication}]
- (703) 746-7239 [Official Communication]
- (703) 746-7240 [Non-Official Communication]

Hand-delivered responses should be brought to:

Crystal Park II
2121 Crystal Drive
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Fourth Floor (Receptionist).

Baoquoc N. To
Nov 13, 2003


KIM VU
SUPERVISORY PATENT EXAMINER
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